

Solicitation, Offer and Award		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)		RATING		PAGE 1		OF PAGES 43	
2. CONTRACT NO.		3. SOLICITATION NO. DTFH61-97-R-00046		4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)		5. DATE ISSUED April 28, 1997		6. REQUISITION/PURCHASE NO. 42-20-7017	
7. ISSUED BY Federal Highway Administration Office of Acquisition Management 400 Seventh Street, SW, Room 4410 Washington, DC 20590				8. ADDRESS OFFER TO (If other than Item 7)					

NOTE: In sealed bid solicitation "offer" and "offeror" mean "bid" and "bidder".

SOLICITATION

9. Sealed offers in original and 6 copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in 400 7th St., S.W., Room 4410, until 4:15pm local time **June 9, 1997**.

CAUTION - LATE Submission, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-10. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL:		A. NAME Lise S. Lyles		B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) (202) 366-4229	
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11. TABLE OF CONTENTS

()	SEC.	DESCRIPTION	PAGE(S)	()	SEC.	DESCRIPTION	PAGE(S)
PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES			
X	A	SOLICITATION/CONTRACT FORM	1	X	I	CONTRACT CLAUSES	15
X	B	SUPPLIES OR SERVICES AND PRICES/COSTS	2	PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.			
X	C	DESCRIPTION/SPECS./WORK STATEMENT	2	X	J	LIST OF ATTACHMENTS	19
X	D	PACKAGING AND MARKING	8	PART IV - REPRESENTATIONS AND INSTRUCTIONS			
X	E	INSPECTION AND ACCEPTANCE	8	X	K	REPRESENTATIONS, CERTIFICATIONS AND	20
X	F	DELIVERIES OR PERFORMANCE	8			OTHER STATEMENTS OF OFFERORS	
X	G	CONTRACT ADMINISTRATION DATA	10	X	L	INSTRS., CONDS., AND NOTICES TO OFFERORS	31
X	H	SPECIAL CONTRACT REQUIREMENTS	14	X	M	EVALUATION FACTORS FOR AWARD	42

OFFER (Must be fully completed by offeror)

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within _____ calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232-8)		10 Calendar Days %	20 Calendar Days %	30 Calendar Days %	Calendar Days %
14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:.		AMENDMENT NO.	DATE	AMENDMENT NO.	DATE
15A. NAME AND ADDRESS OF OFFEROR		CODE _____ FACILITY _____		16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)	
15B. TELEPHONE NO. (Include area code)		15C. CHECK IF REMITTANCE ADDRESS IS <input type="checkbox"/> DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE		17. SIGNATURE	
				18. OFFER DATE	

AWARD (To be completed by Government)

19. ACCEPTED AS TO ITEMS NUMBERED		20. AMOUNT		21. ACCOUNTING AND APPROPRIATION	
22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304(c)() <input type="checkbox"/> 41 U.S.C. 253(c)()				23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)	
24. ADMINISTERED BY (If other than Item 7) CODE _____				25. PAYMENT WILL BE MADE BY CODE _____	
26. NAME OF CONTRACTING OFFICER (Type or print)				27. UNITED STATES OF AMERICA (Signature of Contracting Officer)	
				28. AWARD DATE	

IMPORTANT - Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

P A R T I

SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS

1. The Contractor shall furnish all necessary facilities, materials, and personnel and shall perform all services necessary to conduct a study entitled "The Policy Review Module."
2. The total estimated cost plus fixed fee for the performance of this contract is \$_____, which consists of the estimated cost of \$_____, and a fixed fee of \$_____.
3. All travel shall be reimbursed at cost in accordance with the Travel and Per Diem clause (reference Section G). Travel and per diem shall not exceed \$10,000. This amount is contained within the total contract value as stated above.

SECTION C - DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK

PROSPECTUS

The Federal Highway Administration has designated Highway Safety Design Practices and Criteria as a high-priority research and development area. The objective of this program is to develop an integrated design process that systematically considers safety in developing and evaluating cost-effective highway design alternatives. This broad research is to develop and incorporate a system that can be used in a Computer-Aided Drafting and Design (CADD) environment. Evaluation of design alternatives would include an examination of the entire roadway alignment and cross-section and the roadside design. Work in this area has been underway for several years. The research program is now well defined as the Interactive Highway Safety Design Model (IHSDM). Five modules constitute the IHSDM program: Design Consistency, Driver/Vehicle, Accident Analysis, Policy Review, and Traffic Analysis.

The goal of IHSDM is to develop a systematic approach that will allow the highway designer to explicitly consider the safety implications of design decisions while using CADD. MicroStation and GEOPAK are the CAD and highway design package chosen for prototype development. IHSDM is envisioned to serve on any highway CADD package and platform. The module of concern in this request is the Policy Review Module.

The objective of the Policy Review Module is to notify designers of any design elements that do not meet minimum standards set by the American Association of State Highway and Transportation Officials (AASHTO) design policy on highways and streets and state design standards. This effort will cover the **two-lane rural highway** system. If a design exception is

being considered then the Policy Review Module would facilitate documenting the design exception.

STATEMENT OF WORK

Contract Objectives

The objectives of this study are to develop functional specifications for the Policy Review Module of the Interactive Highway Safety Design Model, test and evaluate the software, and prepare an Engineer's Manual for users of the module.

Scope of Work

Only two-lane rural roads are to be considered for this study. The major scope is to develop functional specifications that as a minimum shall define the input requirements, the elements to be checked, how they will be checked according to the design criteria, and define the output requirements. Based on the functional specifications, a separate software contractor will prepare a conceptual design, a detailed design, coding implementation, and conduct Verification, Validation and Evaluation (VV&E) of the software. Thus, the functional specifications shall provide the necessary details for the software contractor to prepare these latter requirements. In addition, this study shall test and evaluate the software, and provide an Engineer's Manual.

This study requires coordination and cooperation with two other FHWA contractors. The first contractor operates the FHWA Geometric Design Laboratory (GDL) which is located at the Turner-Fairbank Highway Research Center, and the second is the software contractor. The contractor for the GDL is in place, but the software contractor has not been chosen to date. A team effort is crucial to a successful development of the Policy Review Module.

Delineation of Contract Tasks

To achieve the contract objectives, the contractor shall perform, as a minimum, the following tasks:

Task A: Develop the Functional Specifications for the Policy Review Module

1. Review AASHTO's "A Policy on Geometric Design of Highways and Streets," the "Roadside Design Guide," the "Guide for the Development of Bicycle Facilities," and at least three state highway design policies. Review the existing literature, including programming requirements and data base structure, on IHSDM and become familiar with the existing prototype modules for Accident Analysis, and Design Consistency.

00046

DTFH61-97-R-

Page 5 of 43

Visit the FHWA GDL located in McLean, VA to view demonstrations of the various modules under development. The date and time for the visit shall be mutually agreed upon between the Contracting Officer's Technical Representative (COTR) and the contractor.

2. Develop the functional specifications for the two-lane rural road Policy Review Module. The attached paper, "A Policy Review Module for the Interactive Highway Safety Design Model" should be used as a guide (see Section J, Attachment 7). The functional specifications shall encompass the appropriate quantitative policies contained in AASHTO documents including: "A Policy on Geometric Design of Highways and Streets," "Roadside Design Guide," "Guide for the Development of Bicycle Facilities," and the appropriate policies from one State Department of Transportation. In addition, the functional specifications shall include a mechanism for incorporating any State Department of Transportation's policies and standards. As a minimum the following issues shall be detailed in the functional specifications:
 - a. Input requirements (user input and extracted from CADD)
 - b. Design criteria to be included
 - c. Procedures for checking design criteria
 - d. Activities and timing in the design process when and where the Policy Review Module shall be used
 - e. Potential interaction with other modules in IHSDM
 - f. User options, such as the ability to add, delete or revise design criteria
 - g. User requirements, such as how the results shall be presented to the user and what information shall be generated and stored for future reference
 - h. Prototype mock-up using dummy input and output screens
 - i. Incorporation of state guidelines when they differ from AASHTO's policy.

The functional specifications shall contain the level of detail necessary for use by FHWA's software development contractor to develop a software plan for programming the Policy Review Module.

3. Within five months of the effective date of the contract, submit to the COTR five copies of a draft interim report containing the functional specifications for the Policy Review Module. Submit to the Contracting Officer one copy of the transmittal letter. The Government and the GDL and software contractors will review the interim report and will provide written comments to the contractor within 30 days of receipt. Revise the interim report to reflect the Government's written comments and submit to the COTR five copies within 30 days of receipt of the Government's written comments. Submit to the Contracting Officer one copy of the transmittal letter.

Task B - Coordinate with IHSDM Software Development Contractor and Prepare a Pilot Test Plan

1. Specify the two or more design elements to be programmed for a pilot test. Provide technical support to FHWA's contractor for the software development of the Policy Review

Module such as interpretation of the functional specifications. In addition, review the pilot software development plan (developed by the software contractor) to ensure that it meets the functional specifications.

Note: The software contractor will develop a pilot software of the Policy Review Module for the specified design elements that will be tested in Task C. The software contractor will complete and deliver to the prospective contractor the pilot software within 4 months after receipt of the approved functional specifications.

2. Develop a pilot test plan of the Policy Review Module for the two or more specified design elements. The purposes of the pilot test are to: a) ensure the software performs in accordance with the functional specifications, b) evaluate the user interface, and c) demonstrate the capability of the Policy Review Module. The test plan shall identify specific AASHTO policy checks and test for accommodating corresponding state policy for one state.

Note: This task is a team effort involving the prospective contractor developing the Policy Review Module (the subject of this RFP) and the FHWA's software development contractor. The success of this effort depends on both contractors working in a cooperative manner to achieve a common goal.

Task C - Test and Evaluate the Pilot Software

1. Test and evaluate the pilot software developed for the Policy Review Module in accordance with the functional specifications and the pilot test plan. Within 2 months after receipt of the pilot software, submit to the COTR five copies of a report documenting the results including any recommended changes to the program. Provide to the Contracting Officer one copy of the transmittal letter.

Note: This task requires that the prospective contractor has MicroStation and GEOPAK. The contractor shall coordinate with the software development contractor and the GDL to determine correct versions of the software.

2. On or before 30 days after receipt of the report, meet with FHWA personnel and FHWA's software development contractor at the Turner-Fairbank Highway Research Center in McLean, VA to review the recommendations and reach a consensus on revisions that need to be made to the functional specifications and the software development plan. The date and time for the meeting shall be mutually agreed upon between the COTR and the Contractor.

Task D - Coordinate with IHSDM Software Development Contractor

Provide technical support to FHWA's software development contractor of IHSDM to interpret the functional specifications and provide needed assistance during the programming effort. In addition, review the software development plan to ensure that it meets the functional specifications.

Note: The software contractor will develop the final software of the Policy Review within 8 months after receipt of the FHWA comments as a result of Task C.

Note: This task is a team effort involving the prospective contractor and the FHWA's software development contractor. The success of this effort depends on both contractors working in a cooperative manner to achieve a common goal. The FHWA's contractor for software development of IHSDM will be revising the software plan for implementing the Policy Review Module based on the functional specifications developed in Task A and the results of the pilot test and evaluation conducted in Task C.

Task E - Prepare a Final Test Plan for Evaluating the Policy Review Module

1. Develop a test plan for evaluating the completed Policy Review Module. The purposes of the test plan are to: a) ensure the software functions in accordance with the functional specifications and the software development plan, b) ensure that the purpose of the Policy Review Module is clear to the user, c) ensure that it is clear to the user which policies are being checked and how the checks are documented, and d) ensure the capability of the Policy Review Module to evaluate a variety of designs.
2. On or before 6 months after receipt of the Government's written comments from Task C, submit to the COTR five copies of the final test plan. Provide to the Contracting Officer one copy of the transmittal letter. The Government and the GDL and the software contractors will review the test plan report and will provide written comments within 30 days of receipt. Revise the draft test plan to reflect the Government's written comments and submit to the COTR five copies within 30 days after receipt. Provide to the Contracting Officer one copy of the transmittal letter.

Task F - Test and Evaluate the Final Policy Review Module Software

1. Test and evaluate the final software developed for the Policy Review Module in accordance with the functional specifications and the approved test plan. Within 3 months after receipt of the final software, submit to the COTR five copies of a report documenting the results, including any recommended changes, of the evaluation. Provide to the Contracting Officer one copy of the transmittal letter.
2. On or before 30 days after receipt of the report, meet with FHWA personnel and FHWA's software development contractor at the Turner-Fairbank Highway Research Center in McLean, VA to review the recommendations and reach a consensus on revisions that need to be made to the software. The date and time for the meeting shall be mutually agreed upon between the COTR and the Contractor.

00046

DTFH61-97-R-

Page 10 of 43

Task G - Reports and Presentations**1. Oral Presentations**

The Principal Investigator shall conduct at least two oral presentations (indicated in Tasks C and F) at the Turner-Fairbank Highway Research Center in McLean, VA. as requested by the COTR. Each presentation shall cover the project objective, scope, and accomplishments to date, and shall include the distribution of a brief written report and copies of the visual aids used. The scheduling of the presentations shall be determined mutually between the Government and the Contractor.

2. Draft Engineer's Manual and Technical Summary

The contractor shall draft:

- a. An Engineer's Manual which is intended as a reference document for users of the Policy Review Module who are interested in details of the purpose, use, limitations, validation results, and example applications.
- b. A two to four page technical summary describing the purpose, study methodology, results, and recommendations.

On or before 2 months after receipt of the final comments from Task F, submit to the COTR the Draft Engineer's Manual and Technical Summary. Provide to the Contracting Officer one copy of the transmittal letter. The Government will review the Draft Engineer's Manual and Technical Summary and provide written comments within 30 days after receipt. Revise the Draft Engineer's Manual to incorporate the Government's written comments. Submit to the COTR four copies of the revised Engineer's Manual and Technical Summary on or before 30 days after receipt of the Government's written comments. Provide to the Contracting Officer one copy of the transmittal letter.

The Government will conduct an editorial review of the two revised documents and will provide editorial comments to the contractor within 60 days after receipt. The contractor shall incorporate all Government editorial comments and submit to the COTR ten copies of the Final Engineer's Manual, the Final Technical Summary, a camera ready copy, and a 3.5" diskette in WordPerfect 6.1 format on or before 30 days after receipt of the Government's editorial comments. A copy of the transmittal letter for the Final Report shall be sent to the Contracting Officer.

The Engineer's Manual shall follow the FHWA's editorial requirements "Quick Reference Guide", FHWA-RD-95-057, and the "Guidelines for Preparing Federal Highway Administration Publications" (FHWA-AD-88-001), dated January 1988 and Change 1, dated May 20, 1995.

Note: The software development contractor will prepare a software User's Guide for the Policy Review Module.

NOTE: See SECTION L - INSTRUCTIONS TO OFFERORS, for guidance in preparing a response to the above tasks.

SECTION D - PACKAGING AND MARKING

D.1 There are NO articles for this section.

SECTION E - INSPECTION AND ACCEPTANCE

E.1 All work hereunder shall be subject to review by the Government. Acceptance of the final design manual, software and documentation, and training course materials shall be made in writing by the Contracting Officer.

E.2 **52.252-2 Clauses Incorporated by Reference. (JUN 1988)**

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

E.3 **52.246-9 Inspection of Research and Development (Short Form) (APR 1984)**

SECTION F - DELIVERIES OR PERFORMANCE

F.1 PERIOD OF PERFORMANCE

All work and services required hereunder including preparation and submission of the final design manual, software and documentation, and training course materials shall be completed on or before 34 months from the effective date of the contract.

F.2 PLACE OF DELIVERY

All deliverables and a copy of the quarterly reports (See Section G) under the contract shall be delivered F.O.B. Destination, under transmittal letter, to the following address:

Federal Highway Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

Attn: [to be filled in at award]

The quarterly progress report and other items as specified shall be delivered to the Contracting Officer at the following address:

Federal Highway Administration
Office of Acquisition Management
HAM-30, Room 4410
Washington, D.C. 20590

F.3 SCHEDULE OF WORK

All tasks set forth in the Statement of Work shall be performed in accordance with the work schedule as negotiated. Performance shall begin on the effective date of the contract.

F.4 52.242-15 Stop-Work Order. (AUG 1989) -- Alternate I (APR 1984)

- (a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work order is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either:

- (1) Cancel the stop-work order; or
- (2) Terminate the work covered by the order as provided in the Termination clause of this contract.

00046

DTFH61-97-R-

Page 14 of 43

- (b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule, the estimated cost, the fee, or a combination thereof, and in any other terms of the contract that may be affected, and the contract shall be modified, in writing, accordingly, if:
 - (1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and
 - (2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; *provided*, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal submitted at any time before final payment under this contract.
- (c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.
- (d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

SECTION G - CONTRACT ADMINISTRATION DATA

G.1 QUARTERLY PROGRESS REPORTS

The Contractor shall furnish to the COTR one copy of a quarterly progress report within the last 15 days of each quarter, and one copy to the Contracting Officer. The Contractor shall also furnish one copy of the quarterly progress report to the Contracting Officer. The report shall include a narrative section and figures as shown below:

- a. A clear and complete account of the work performed on each task.
- b. An outline of the work to be accomplished during the next report period.
- c. A description of any problem encountered or anticipated that will affect the completion of the contract within the time and fiscal constraints as set forth in the contract, together with recommended solutions to such problems; or, a statement that no problems were encountered.

00046

DTFH61-97-R-

Page 16 of 43

- d. A tabulation of the planned, actual and cumulative person-hours expended by the personnel identified in the Professional Staffing of the contract.
- e. A chart showing current and cumulative expenditures by tasks versus planned expenditures. (See Attachment 1b.)
- f. Current and cumulative hours and costs expended for ADP services (programming, computer time, etc.) or a statement that there were none.

G.2 FUNDS AVAILABLE

The clause entitled "LIMITATION OF COST" applies to this contract. Any notification required on the part of the Contractor shall be made in writing to the Contracting Officer. In the event that the contract is not funded beyond the estimated cost set forth in the schedule, the Contractor shall deliver to the Contracting Officer the data collected and the material produced or in process or acquired in connection with the performance of the project provided herein together with a summary report in five copies on its progress and accomplishments to date.

G.3 PAYMENT

- a. The Contractor may be reimbursed for direct and indirect costs incurred in the performance hereof as are allowable under the provisions of Subpart 31.2, 31.3, 31.6, or 31.7 (as applicable) of the Federal Acquisition Regulation in the not-to-exceed amount of \$_____ (to be negotiated) subject to the Limitation of Cost Clause.
- b. The Government shall pay the Contractor for performing this contract the fixed fee specified in the Schedule. Payment of the fixed fee shall be made as specified in the Schedule; provided that after payment of 85 percent of the fixed fee, the Contracting Officer may withhold further payment of fee until a reserve is set aside in an amount that the Contracting Officer considers necessary to protect the Government's interest. This reserve shall not exceed 15 percent of the total fixed fee or \$100,000, whichever is less. The Contracting Officer shall release 75 percent of all fee withholds under this contract after receipt of the certified final indirect cost rate proposal covering the year of physical completion of this contract, provided the Contractor has satisfied all other contract terms and conditions, including the submission of the final patent and royalty reports, and is not delinquent in submitting final vouchers on prior years' settlements. The Contracting Officer may release up to 90 percent of the fee withholds under this

00046

DTFH61-97-R-

Page 18 of 43

contract based on the Contractor's past performance related to the submission and settlement of final indirect cost rate proposals.

- c. Each monthly interim payment request shall be supported by a statement of costs incurred by the Contractor in the performance of this contract and claimed to constitute allowable costs. In accordance with the clause 52.232-25, "Prompt Payment," these payments shall be made by the 30th day after receipt of proper request by the designated billing office. Any payments hereunder will be made upon determination by the Contracting Officer that the requirements of the contract are being met.
- d. Final invoice payment shall be made upon the Contracting Officer's determination that all requirements of the contract have been completed. The payment due date for final invoice shall be established in compliance with the clause 52.232-25.
- e. Each monthly interim payment request and the final invoice shall be submitted in accordance with the format contained in the attached "The FHWA Billing Instructions for Cost-Reimbursement Contracts" to be considered proper for payment. Prior approval of the Contracting Officer is required if the Contractor wishes to use a different format.

G.4 INDIRECT COSTS

Pending the establishment of final indirect cost rates which shall be negotiated based on audit of actual costs as provided in Subpart 42.7 of the Federal Acquisition Regulation, the Contractor shall be reimbursed for allowable indirect costs hereunder at the billing rate of [__TO BE NEGOTIATED__]. This INDIRECT COST provision does not operate to waive the LIMITATION OF COST Clause. The Contractor's audited final indirect costs are allowable only insofar as they do not cause the Contractor to exceed the total estimated costs for performance of the contract listed on page 2 (SECTION B) and under the PAYMENT provision above.

G.5 TRAVEL AND PER DIEM

Travel and Per Diem authorized under this contract shall be reimbursed in accordance with the Government Travel Regulations currently in effect.

Travel requirements under this contract shall be met using the most economical form of transportation available. If economy class transportation is not available, the request for payment voucher must be submitted with justification for use of higher class travel indicating dates, times, and flight numbers. All travel shall be scheduled sufficiently in advance to take advantage of offered discount rates, unless authorized by the Contracting Officer.

G.6 CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR)

The Contracting Officer has designated _____ as Technical Representative (COTR) to assist in monitoring the work under this contract. The COTR is responsible for the technical administration of the contract and technical liaison with the Contractor. The COTR IS NOT authorized to change the scope of work or specifications as stated in the contract, to make any commitments or otherwise obligate the Government or authorize any changes which affect the contract price, delivery schedule, period of performance or other terms or conditions.

The Contracting Officer is the only individual who can legally commit or obligate the Government for the expenditure of public funds. The technical administration of this contract shall not be construed to authorize the revision of the terms and conditions of this contract. Any such revision shall be authorized in writing by the Contracting Officer.

G.7 SUBCONTRACTS - ADVANCE NOTIFICATION AND CONSENT

Under this contract, the requirements of FAR 44.2, CONSENT TO SUBCONTRACTS, have been fulfilled for the following subcontracts:

[as negotiated]

Any future change or revision to the Statement of Work or other applicable aspects of this contract shall include the subcontract(s) only to the extent that performance of the subcontract(s) is directly affected by the change or revision.

G.8 KEY PERSONNEL

The Contractor has designated _____ as the key personnel under this contract. In the event that any key personnel become unavailable to continue in the performance of this contract, the appointment of a replacement shall be subject to prior approval of the Contracting Officer.

G.9 PROFESSIONAL STAFFING

The Contractor agrees to assign the following professional staffing to this contract work (as negotiated, see Section L). In the event the Contractor finds it necessary to replace any of the assigned personnel during the performance of the contract, the Contracting Officer shall be notified in advance.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 COMPUTER RELATED SERVICES

The contract provides for the following ADP services:

[LIST]

Any change in performance requirements of the contract affecting these items shall be coordinated with the Contract Administrator immediately. The Contractor shall not exceed these limitations without prior approval of the Contracting Officer.

NOTE: At this time availability of Government computer facilities for use under this contract has not been determined. The Contractor shall not expend any funds for ADP services until authorized to do so by the Contracting Officer. See Attachment 4, Section J for FHWA ADP requirements.

P A R T I I

SECTION I - CONTRACT CLAUSES

FH.1 Printing Restrictions

All printing funded by this agreement must be done in conformance with Joint Committee on Printing regulations as prescribed in Title 44, United States Code, and Section 308 of Public Law 101-163, and all applicable Government Printing Office and Department of Transportation regulations.

52.222-2 Payment for Overtime Premium (JUL 1990)

- (a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed [*] or the overtime premium is paid for work:
 - (1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdowns of production equipment, or occasional production bottlenecks of a sporadic nature;
 - (2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;
 - (3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or
 - (4) That will result in lower overall costs to the Government.
- (b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall:
 - (1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

00046

DTFH61-97-R-

Page 23 of 43

- (2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;
- (3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other Government contracts, together with identification of each affected contract; and
- (4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

[*Insert either “zero” or the dollar amount agreed to during negotiations. The inserted figure does not apply to the exceptions in subparagraph (a)(1) through (a)(4) of the clause.]

52.252-2 Clauses Incorporated by Reference (JUN 1988)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES

52.202-1	Definitions	OCT 1995
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-7	Anti-Kickback Procedures	JUL 1995
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity	JAN 1997
52.203-12	Limitation on Payments to Influence Certain Federal Transactions	JAN 1990
52.204-4	Printing/Copying Double-Sided on Recycled Paper	JUN 1996
52.209-6	Protecting the Governments Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	JUL 1995
52.215-2	Audit and Records--Negotiation	AUG 1996
52.215-24	SubContractor Cost or Pricing Data	OCT 1995
52.215-23	Price Reduction for Defective Cost or Pricing Data - Modifications	OCT 1995
52.215-25	SubContractor Cost or Pricing Data - Modifications	OCT 1995

00046

Page 25 of 43

52.215-33	Order of Precedence	JAN 1986
52.216-7	Allowable Cost and Payment	FEB
1997		
52.216-8	Fixed Fee	FEB 1997
52.216-11	Cost Contract - No Fee	APR 1984
52.216-12	Cost-Sharing Contract - No Fee	APR 1984
52.216-15	Predetermined Indirect Cost Rates	AUG 1996
52.219-8	Utilization of Small, SmallDisadvantaged and Women-Owned Small Business Concerns	OCT 1995
52.222-3	Convict Labor	AUG 1996
52.222-26	Equal Opportunity	APR 1984
52.222-35	Affirmative Action for Special Disabled and Vietnam Era Veterans	APR 1984
52.222-36	Affirmative Action for Handicapped Workers	APR 1984
52.222-37	Employment Reports on Special Disabled Veterans and Veterans of the Vietnam Era	JAN
1988		
52.223-2	Clean Air and Water	APR 1984
52.223-6	Drug-Free Workplace	JAN 1997
52.225-11	Restrictions on Certain Foreign Purchases	OCT 1996
52.227-2	Notice and Assistance Regarding Patent and Copyright Infringement	AUG 1996
52.227-14	Rights in Data - General	JUN 1987
52.227-16	Additional Data Requirements	JUN 1987
52.228-7	Insurance - Liability to Third Persons	MAR 1996
52.232-9	Limitation on Withholding of Payments	APR 1984
52.232-17	Interest	JUN 1996
52.232-22	Limitation of Funds	APR 1984
52.232-23	Assignment of Claims	JAN 1986
52.232-25	Prompt payment	MAR 1994
52.233-1	Disputes	OCT 1995
52.233-3	Protest After Award (AUG 1996) -- Alternate I	JUN 1985
52.242-1	Notice of Intent to Disallow Costs	APR 1984
52.242-2	Production Progress Reports	APR
1991		
52.242-4	Certification of Final Indirect Costs	JAN 1997
52.242-13	Bankruptcy	JUL 1995
52.243-2	Changes - Cost-Reimbursement	AUG 1987
52.244-2	Subcontracts (Cost-Reimbursement and Letter Contracts)	FEB
1997		
52.244-5	Competition in Subcontracting	DEC 1996

00046

52.249-5	Termination for Convenience of the Government (Educational and Other Nonprofit Institutions)	SEP 1996
52.249-6	Termination (Cost-Reimbursement)	SEP
1996		
52.249-14	Excusable Delays	APR 1984
52.253-1	Computer Generated Forms	JAN 1991

**II. DEPARTMENT OF TRANSPORTATION ACQUISITION REGULATIONS
(48 CHAPTER 12) CLAUSES**

1252.242-70	Dissemination of information - educational institutions	OCT 1994
1252.242-71	Contractor testimony	OCT 1994
1252.242-72	Dissemination of contract information	OCT 1994

52.252-4 ALTERATIONS IN CONTRACT (APR 1984)

Portions of this contract are altered as follows:

None.

P A R T I I I

SECTION J - LIST OF ATTACHMENTS

1. Sample Formats for Progress Reports
 - a. Quarterly Progress Report - 1 page
 - b. Progress by Task - 1 page
2. Sample Format for Staffing Assignments/Task Breakdown - 1 page
3. Standard Form 1448 and Price Proposal Budget Summary Format - 2 pages
4. FHWA ADP Information and Requirements with ADP Equipment and Services Form and Documentation Guidelines for Microcomputer Applications Information Systems - 10 pages
5. Standard Form LLL, Disclosure of Lobbying Activities - 3 pages
6. Optional Form 17, Offer Label - 1 page
7. “A Policy Review Module for the Interactive Highway Safety Design Model” - 8 pages

P A R T I V**SECTION K - REPRESENTATIONS, CERTIFICATIONS, AND OTHER
STATEMENTS OF OFFERORS OR QUOTERS****52.204-3 Taxpayer Identification (MAR 1994)****(a) *Definitions.***

“Common parent,” as used in this solicitation provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

“Corporate status,” as used in this solicitation provision, means a designation as to whether the offeror is a corporate entity, an unincorporated entity (e.g., sole proprietorship or partnership), or a corporation providing medical and health care services.

“Taxpayer Identification Number (TIN),” as used in this solicitation provision, means the number required by the IRS to be used by the offeror in reporting income tax and other returns.

- (b) All offerors are required to submit the information required in paragraphs (c) through (e) of this solicitation provision in order to comply with reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M and implementing regulations issued by the Internal Revenue Service (IRS). If the resulting contract is subject to reporting requirements described in FAR 4.903, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) *Taxpayer Identification Number (TIN).*

___ TIN: _____.

___ TIN has been applied for.

___ TIN is not required because:

___ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the

U.S. and does not have an office or place of business or a fiscal paying agent in the U.S.;

___ Offeror is an agency or instrumentality of a foreign government;

___ Offeror is an agency or instrumentality of a Federal, state or local government;

___ Other. State basis. _____

(d) *Corporate Status.*

___ Corporation providing medical and health care services, or engaged in the billing and collecting of payments for such services;

___ Other corporate entity;

___ Not a corporate entity;

___ Sole proprietorship

___ Partnership

___ Hospital or extended care facility described in 26 CFR 501(c)(3) that is exempt from taxation under 26 CFR 501(a).

(e) *Common Parent*

___ Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this clause.

___ Name and TIN of common parent:

Name _____

TIN _____

52.204-5 Women-Owned Business (OCT 1995)

- (a) *Representation.* The offeror represents that it () is, () is not a women-owned business concern.

- (b) *Definition.* “Women-owned business concern,” as used in this provision, means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

52.209-5 Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters (MAR 1996)

- (a) The Offeror certifies:

- (1) to the best of its knowledge and belief, that:

- (i) The Offeror and/or any of its Principals:

- (A) Are () are not () presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;
- (B) Have () have not (), within a 3-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and
- (C) Are () are not () presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(B) of this provision.

- (ii) The Offeror has () has not (), within a 3-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

- (2) “Principals,” for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory

responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This certification concerns a matter within the jurisdiction of an agency of the United States and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under section 1001, title 18, United States Code.

- (b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.
- (d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

52.215-6 Type of Business Organization (JUL 1987)

The offeror or quoter, by checking the applicable box, represents that:

- (a) operates as ___ a corporation incorporated under the laws of the State of _____, ___ an individual, ___ a partnership, ___ a nonprofit organization, or ___ a joint venture; or
- (b) If the offeror or quoter is a foreign entity, it operates as ___ an individual, ___ a partnership, ___ a nonprofit organization, ___ a joint venture, or ___ a corporation, registered for business in _____ (country).

52.215-11 Authorized Negotiators (APR 1984)

The offeror or quoter represents that the following persons are authorized to negotiate on its behalf with the Government in connection with this request for proposals or quotations:

(list names, titles, and telephone numbers of the authorized negotiators).

FH.3 Other Communications

To facilitate communications, please provide your Telefax (FAX) number, if available.

FAX Number: _____

FH.4 Federal Procurement Data

Each Contractor receiving an award over \$25,000 will be requested to provide the information as set forth below:

- (1) Dun and Bradstreet Number: _____
- (2) Home Office County and Congressional District: _____
- (3) Congressional District of the Principal place of performance:

- (4) SIC (Standard Industrial Code):

52.219-1 Small Business Program Representations (JAN 1997)

- (a) (1) The standard industrial classification (SIC) code for this acquisition is 8742.
- (2) The small business size standard is an annual average gross revenues for the last three years that does not exceed \$5 million dollars.
- (3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

THIS REQUIREMENT IS NOT A SMALL BUSINESS SET-ASIDE.

(b) *Representations.*

- (1) The offeror represents as part of its offer that it () is, () is not a small business concern.
- (2) (Complete only if offeror represented itself as a small business concern in block (b)(1) of this section.) The offeror represents as part of its offer that it () is, () is not a small disadvantaged business concern.
- (3) (Complete only if offeror represented itself as a small business concern in block (b)(1) of this section.) The offeror represents as part of its offer that it () is, () is not a women-owned small business concern.

(c) *Definitions.*

Joint venture, for purposes of a small disadvantaged business (SDB) set-aside or price evaluation preference (as prescribed at 13 CFR 124.321), is a concern that is owned and controlled by one or more socially and economically.

Small business concern, as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

Small disadvantaged business concern, as used in this provision, means a small business concern that (1) is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and (2) has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR Part 124.

Women-owned small business concern, as used in this provision, means a small business concern--

- (1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
 - (2) Whose management and daily business operations are controlled by one or more women.
- (d) *Notice.*
- (1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.
 - (2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small or small disadvantaged business concern in order to obtain a contract to be awarded under the preference programs established pursuant to sections 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--
 - (i) Be punished by imposition of fine, imprisonment, or both;
 - (ii) Be subject to administrative remedies, including suspension and debarment; and
 - (iii) Be ineligible for participation in programs conducted under the authority of the Act.

52.219-2 Equal Low Bids (OCT 1995)

- (a) This provision applies to small business concerns only.
- (b) The bidder's status as a labor surplus area (LSA) concern may affect entitlement to award in case of tie bids. If the bidder wishes to be considered for this priority, the bidder must identify, in the following space, the LSA in which the costs to be incurred on account of manufacturing or production (by the bidder or the first-tier subcontractors) amount to more than 50 percent of the contract price.

- (c) Failure to identify the labor surplus area as specified in paragraph (b) of this provision will preclude the bidder from receiving priority consideration. If the bidder is awarded a contract as a result of receiving priority consideration under this provision and would not have otherwise received award, the bidder shall perform the contract or cause the contract to be performed in accordance with the obligations of an LSA concern.

52.222-21 Certification of Nonsegregated Facilities (APR 1984)

- (a) “Segregated facilities,” as used in this provision, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise.
- (b) By the submission of this offer, the offeror certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The offeror agrees that a breach of this certification is a violation of the Equal Opportunity clause in the contract.
- (c) The offeror further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will:
 - (1) Obtain identical certifications from proposed subcontractors before the award of subcontracts under which the subcontractor will be subject to the Equal Opportunity clause;
 - (2) Retain the certifications in the files; and
 - (3) Forward the following notice to the proposed subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

**NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR
CERTIFICATIONS OF NONSEGREGATED FACILITIES**

A Certification of Nonsegregated Facilities must be submitted before the award of a subcontract under which the subContractor will be subject to the Equal Opportunity clause.

The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

52.222-22 Previous Contracts and Compliance Reports (APR 1984)

The offeror represents that:

- (a) It ___ has, ___ has not participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the clause originally contained in Section 310 of Executive Order No. 10925, or the clause contained in Section 201 of Executive Order No. 11114;
- (b) It ___ has, ___ has not, filed all required compliance reports; and
- (c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

52.222-25 Affirmative Action Compliance (APR 1984)

The offeror represents that:

- (a) It ___ has developed and has on file, ___ has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2); or
- (b) it ___ has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

52.223-1 Clean Air and Water Certification (APR 1984)

The Offeror certifies that:

- (a) Any facility to be used in the performance of this proposed contract is ___ , is not ___ listed on the Environmental Protection Agency (EPA) List of Violating Facilities;
- (b) The Offeror will immediately notify the Contracting Officer, before award, of the receipt of any communication from the Administrator, or a designee, of the EPA, indicating that any facility that the Offeror proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and

- (c) The Offeror will include a certification substantially the same as this certification, including this paragraph (c), in every nonexempt subcontract.

52.227-15 Representation of Limited Rights Data and Restricted Computer Software (JUN 1987)

- (a) This solicitation sets forth the work to be performed if a contract award results, and the Government's known delivery requirements for data (as defined in FAR 27.401). Any resulting contract may also provide the Government the option to order additional data under the Additional Data Requirements clause at 52.227-16 of the FAR, if included in the contract. Any data delivered under the resulting contract will be subject to the Rights in Data - General clause at 52.227-14 that is to be included in this contract. Under the latter clause, a Contractor may withhold from delivery data that qualify as limited rights data or restricted computer software, and deliver form, fit, and function data in lieu thereof. The latter clause also may be used with its *Alternates II* and/or *III* to obtain delivery of limited rights data or restricted computer software, marked with limited rights or restricted rights notices, as appropriate. In addition, use of *Alternate V* with this latter clause provides the Government the right to inspect such data at the Contractor's facility.
- (b) As an aid in determining the Government's need to include any of the aforementioned *Alternates* in the clause at 52.227-14, Rights in Data - General, the offeror's response to this solicitation shall, to the extent feasible, complete the representation in paragraph (b) of this provision to either state that none of the data qualify as limited rights data or restricted computer software, or identify which of the data qualifies as limited rights data or restricted computer software. Any identification of limited rights data or restricted computer software in the offeror's response is not determinative of the status of such data should a contract be awarded to the offeror.

REPRESENTATION CONCERNING DATA RIGHTS

Offeror has reviewed the requirements for the delivery of data or software and states (offeror check appropriate block) -

- _____ None of the data proposed for fulfilling such requirements qualifies as limited rights data or restricted computer software.
- _____ Data proposed for fulfilling such requirements qualify as limited rights data or restricted computer software and are identified as follows:

Note: "Limited rights data" and "Restricted computer software" are defined in the contract clause entitled "Rights In Data - General."

FH.2 Notification Of Defective Invoices

Each Contractor receiving an award will be requested to identify a person or office to be contacted for prompt notification regarding the receipt by the Government of a defective invoice.

Name _____

Title _____

Address _____

City & State _____ Zip Code _____

Area Code _____ Telephone No. _____

Telex No. _____ TWX _____

00046

DTFH61-97-R-

Page 40 of 43

TO BE COMPLETED BY OFFEROR

NAME: _____

DATE: _____

BY: _____

(Signature)

(Title)

SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

(please show the RFP number and closing date on the forwarding envelope)

NOTE: Only uniformed couriers dressed in a uniform bearing their organization's name and possessing official identification may deliver proposals or sealed bids directly to Room 4410. Security procedures prohibit nonuniformed couriers from delivering material directly to offices in the Nassif Building; such couriers must deliver material to the northeast guard station at the Nassif Building. The guard will accept the material, dismiss the courier, and then the material will be examined prior to being delivered to Room 4410 through the normal Nassif Building mail delivery procedures. Offerors planning to use nonuniformed couriers should make allowances for these procedures in order to assure that offers arrive at Room 4410 on time. Bids/offers must be received in Room 4410 to be considered timely, not just delivered to the Nassif mail room or loading dock. To assist in expediting delivery after the guard accepts a bid/offer, the outside of the envelope/package containing the offer should be marked with the completed Optional Form 17, Offer Label, provided with this solicitation as Attachment No. 6, see SECTION J.

NOTE: As prescribed by 52.215-16, the Government may award a contract on the basis of initial offers received, without discussion. Therefore, each initial offer should contain the offeror's best terms from a price and technical standpoint.

NOTE: Facsimile bids/proposals will not be considered for this solicitation.

52.215-12 Restriction on Disclosure and Use of Data. (APR 1984)

Offerors or quoters who include in their proposals or quotations data that they do not want disclosed to the public for any purpose or used by the Government except for evaluation purposes, shall:

- (a) Mark the title page with the following legend:

“This proposal or quotation includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed - in whole or in part - for any purpose other than to evaluate this proposal or quotation. If, however, a contract is awarded to this offeror or quoter as a result of - or in connection with - the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government’s right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction

are contained in sheets _____ (*insert numbers or other identification of sheets*);
and

- (b) Mark each sheet of data it wishes to restrict with the following legend:

“Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal or quotation.”

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates awarding a cost reimbursement contract from this solicitation.

THIS REQUIREMENT IS NOT A SMALL BUSINESS SET-ASIDE.

Instructions for Preparation of Proposals

In responding to this solicitation please submit your proposal in four separate parts as follows:

Part I - Technical Proposal

A technical proposal, not to exceed 30 pages, including figures, tables, and appendices, describing how you would proceed if awarded a contract. Include the following elements in your technical proposal (see also the statement of work and the technical evaluation criteria):

- A. Technical and management approach.
- B. Assumptions, deviations, and exceptions (as necessary).
- C. Identify technical uncertainties, and make specific proposals for the resolution of any uncertainties.
- D. An organized workplan setting forth a specific schedule of the work to be performed as outlined in Section C, STATEMENT OF WORK. The workplan shall be in such a form as to establish a firm schedule of dates for the start and completion of all tasks as described in the statement of work.
- E. **Special requirements**

The following shall be included in the proposal:

1. The name(s) and title(s) of the person(s) who actually wrote the proposal.

2. A list of published and unpublished literature used in preparation of the proposal.
3. A clear indication of how the offeror will accommodate normal delays and problems encountered in research of this type so as to complete the required work within the proposed cost and schedule.
4. A project time line by task.
5. Offerors shall include in their proposals a prototype or draft set of functional specifications for the Policy Review Module.
6. The offeror shall include in the proposal the specified design elements required in item 1 of Task B, and provide a summary of the pilot test plan.

Part II - Staffing Proposal

Provide the names of all personnel and the positions they will occupy as related to this project. The estimated professional and technical staffing shall be provided in staff-hours. Biographical summaries of key personnel shall also be included.

NOTE: The staffing information shall be provided on a task by task basis by discipline in accordance with the format identified as Attachment 2, Section J.

The Principal Investigator shall devote at least 18 percent of his/her working time to the effort during the period of performance of Tasks A - C and serve as a principle resource during the performance of other Tasks.

The FHWA reserves the right to approve any changes in the Principal Investigator or other key personnel.

The following disciplines and/or expertise are believed to be necessary for the successful completion of this project:

Highway design, and computer programming.

The Government's estimate of staffing is shown below. The estimate is advisory, it should be used as a general guide and not be considered as a maximum or minimum limit by the offerors in preparing their proposal.

LEVEL OF EFFORT IN PERSON-HOUR BY TASK

DISCIPLINE/TASK	A	B	C	D	E	F	G	TOTAL
Research/Highway Design Engineer (PI)	300	80	80	100	60	80	160	860
Highway Design Engineer	60	40	40	40	40	16	20	256
Computer Programmer	60	16	16	16	24	16	8	156
Technical Writer/Editor							60	60
Supporting Staff	40	8	16	16	16	16	40	152
Consultants	24	4	8	8	8	8		60
TOTAL	484	148	160	180	148	136	288	1,544

Part III - BUSINESS AND COST/PRICE PROPOSAL

This volume shall include all pricing information and certain general financial/organizational information, as described below:

A. Cost/Price Information

1. Cost estimates by task. Cost and pricing data are not required in response to this solicitation because it is anticipated that the resultant contract award is at or below the cost or pricing data threshold (currently \$500,000). The Government will make a price analysis to determine the reasonableness of the price and any need for further negotiation. **Offerors are asked to submit information other than cost or pricing data by submitting the Standard Form 1448 and Price Proposal Budget Summary, see Section J, Attachment 3. This information other than cost or pricing data is necessary in order to help establish price reasonableness or price realism.**

NOTE: The Government's cost estimate for travel is \$10,000. This includes three trips to the Turner Fairbank Highway Research Center located in McLean, Virginia, and two trips to the software contractor. Each offeror shall provide a detailed cost estimate showing how the travel money will be allocated among the various tasks of the study. If an offeror determines the Government's estimate of travel is low, the Government will consider an increase in travel costs if adequate justification is provided.

2. Facilities and Special Equipment, Including Tooling.

It is the general policy of the FHWA not to provide general or special purpose equipment, facilities, or tooling of a capital nature except in unusual circumstances. Items having a unit cost of less than \$1,000 will not be provided to you except as authorized with nonprofit institutions or State and local governments. **If special purpose equipment of a capital nature is being proposed, provide a description of the items, details of the proposed cost including competitive prices, and a justification as to why the Government should furnish the equipment or allow its purchase with contract funds.**

3. Your proposal must include a statement regarding availability of facilities and equipment necessary to accomplish the required work. If any or all of the required facilities are Government-owned, a complete listing of these facilities is required and the name of the cognizant Government agency furnishing the facilities and the facilities contract number(s).

4. Subcontracts/Consultants.

If subcontractors and/or individual consultants will be used in carrying out the requirements of this project, the following minimum information concerning the subcontractor shall be furnished:

- a. Name and address of the subcontractor or consultant.
 - b. Statement of work and work plan (schedule) for the portion of work to be conducted by the subcontractor or consultant.
 - c. Names and positions of personnel who will work on the project.
 - d. A letter or other statement from each proposed consultant and/or subcontractor indicating that he has been approached on the matter of participation in this study and that he is willing and able to do so in the terms indicated.
5. ADP Services/Equipment.

If ADP services are anticipated in carrying out the requirements of the project, the information set out in Attachment 4, Section J shall be completed, and the form shall be returned with your submission.

- B. Other Financial/Organizational Information

1. General Information. You must attach a supplemental sheet providing the following information:
 - a. Indicate your fiscal year period (provide month to month dates).
 - b. Indicate whether the proposed indirect cost rate(s) have been audited and accepted by any Federal audit agency. Give name, location and telephone number of the agency, and the date of acceptance.
 - c. Indicate whether your system of control of Government property has been approved by a Government agency. If so, provide the name, location and telephone number of the Government agency, and date of approval.
 - d. Indicate whether written purchasing procedures exist, and whether your purchasing system has been approved by a Government agency. If so, provide the name, location and telephone number of the cognizant agency, and date of approval.
 - e. Indicate whether your cost estimating system has been approved by any Government agency. If so, provide the name, location and telephone number of the cognizant agency, and date of approval.
 - f. Indicate whether your cost accumulation system has been approved by any Government agency. If so, provide the name, location and telephone number of the cognizant agency, and date of approval.
2. Past Performance References.

The offeror is required to submit, as part of its proposal, information on all contracts involving similar or related services over the past three years with FHWA and/or other organizations (both commercial and Governmental). The information must include the name and address of the organization for which services were performed; the current telephone number of a responsible technical representative of the organization; the contract number, if applicable; the type of contract performed; and a brief description of the services provided, including the period of performance. FHWA may use this information to contact technical representative on previous contracts to obtain information regarding performance. Failure to provide complete information regarding previous similar and/or related contracts may result in eventual disqualification. The contracting officer will consider such performance information along with other factors in determining whether the offeror is to be considered responsible, as defined in FAR 9.101.

List any contract that was terminated for convenience of the Government within the past 3 years, and any contract that was terminated for default within the past 5 years. Briefly explain the circumstances in each instance.

Publications

The FHWA publications may be obtained at the address below:

Research and Technology Report Center
9701 Philadelphia Court, Suite Q
Lanham, Maryland 20706
(301) 577-0818

Federal Information Processing Standards Publication 38 (FIPS PUB) dated February 15, 1976, and FIPS PUB 64 dated August 1, 1979, are incorporated by reference and is available for purchase from:

National Technical Information Service
5235 Port Royal Road
Springfield, Virginia 22164
(703) 487-4650

Until a formal notice of award is issued, no communication by the Government either written or oral shall be interpreted as a promise that an award will be made.

The Contracting Officer is the only individual who can legally commit or obligate the Government to the expenditure of public funds. No cost chargeable to the proposed contract can be incurred before receipt of a fully executed contract or specific written authorization from the Contracting Officer.

52.233-2 SERVICE OF PROTEST (OCT 1995)

- (a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO) or the General Services Administration Board of Contract Appeals (GSBCA), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgement of receipt from Mr. Frank J. Waltos, HAM-20, Room 4404, 400 Seventh Street, SW., Washington, D.C. 20590.
- (b) The copy of any protest shall be received in the office designated above on the same day a protest is filed with the GSBCA or within one day of filing a protest with the GAO.
- (c) In this procurement, you may not protest to the GSBCA because of the nature of supplies or services being procured.

00046

DTFH61-97-R-

Page 49 of 43

**I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)
SOLICITATION PROVISIONS**

**52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE.
(JUN 1988)**

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

52.215-5	Solicitation Definitions	JUL 1987
52.215-7	Unnecessarily Elaborate Proposals or Quotations	APR 1984
52.215-8	Amendments to Solicitations	DEC 1989
52.215-9	Submission of Offers	FEB 1997
52.215-10	Late Submissions, Modifications, and Withdrawals of Proposals	FEB 1997
52.215-13	Preparation of Offers	APR 1984
52.215-14	Explanation to Prospective Offerors	APR 1984
52.215-15	Failure to Submit Offer	JUL 1995
52.215-16	Contract Award	OCT 1995
52.215-30	Facilities Capital Cost of Money	SEP 1987
52.215-41	Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data	JAN 1997

(a) Exceptions from cost or pricing data.

- (1) In lieu of submitting cost or pricing data, offerors may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable.
 - (i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

- (ii) For a commercial item exception, the offeror shall submit, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price for this acquisition.

Such information may include--

- (A) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities.
 - (B) For market-priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market.
 - (C) For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.
- (2) The offeror grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this provision, and the reasonableness of price. Access does not extend to cost or profit information or other data relevant solely to the offeror's determination of the prices to be offered in the catalog or marketplace.
- (b) Requirements for cost or pricing data. If the offeror is not granted an exception from the requirement to submit cost or pricing data, the following applies:
 - (1) The offeror shall submit cost or pricing data on Standard Form (SF) 1411, Contract Pricing Proposal Cover Sheet (Cost or Pricing Data Required), with supporting attachments prepared in accordance with Table 15-2 of FAR 15.804-6(b)(2).

- (2) As soon as practicable after agreement on price, but before contract award (except for unpriced actions such as letter contracts), the offeror shall submit a Certificate of Current Cost or Pricing Data, as prescribed in FAR 15.804-4.

52.215-42 Requirements for Cost or Pricing Data or Information Other Than
Cost or Pricing Data--Modifications

JAN

1997

- (a) Exceptions from cost or pricing data.

- (1) In lieu of submitting cost or pricing data for modifications under this contract, for price adjustments expected to exceed the threshold set forth at FAR 15.804-2(a)(1) on the date of the agreement on price or the date of the award, whichever is later, the Contractor may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable--

- (i) Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

- (ii) Information on modifications of contracts or subcontracts for commercial items.

- (A) If (1) The original contract or subcontract was granted an exception from cost or pricing data requirements because the price agreed upon was based on adequate price competition, or prices set by law or regulation, or was a contract or subcontract for the acquisition of a commercial item, and (2) the modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial item.

- (B) For a commercial item exception, the Contractor shall provide, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price of the modification. Such information may include:
 - (1) For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities.
 - (2) For market-price items, the source and date or period of the market quotation or other basis for market price, the base amount, and the applicable discounts. In addition, describe the nature of the market.
 - (3) For items included on an active Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule.
- (2) The Contractor grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this clause, and the reasonableness of price. Access does not extend to cost or profit information or other data relevant solely to the Contractor's determination of the prices to be offered in the catalog or marketplace.
- (b) Requirements for cost or pricing data. If the Contractor is not granted an exception from the requirement to submit cost pricing data, the following applies:
 - (1) The Contractor shall submit cost or pricing data on standard Form (SF) 1411 Contract Pricing Proposal Cover Sheet (Cost or Pricing Data Required), with supporting attachments prepared in accordance with Table 15-2 of FAR 15.804-6(b)(2).

00046

- (2) As soon as practical after agreement on price, but before award (except for unpriced actions), the Contractor shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.804-4.

52.227-6 Royalty Information

APR 1984

II. DEPARTMENT OF TRANSPORTATION ACQUISITION REGULATION (48 CFR CHAPTER 12) SOLICITATION PROVISIONS

52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS (APR 1984)

- (a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.
- (b) The use in this solicitation of any Department of Transportation Acquisition Regulation (48 CFR Chapter 12) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the regulation.

SECTION M - EVALUATION FACTORS FOR AWARD

Evaluation Criteria

A. Technical

Technical proposals will be evaluated on the following criteria listed in order of descending importance:

1. Adequacy of proposed staff, resources, and timely schedule

- a. Demonstrated knowledge of the proposed principal investigator in highway design policies and standards, and highway design practices.
- b. Demonstrated technical competence of the proposed staff in highway design, and computer programming.
- c. Abilities of the proposed principal investigator to direct a research project and team and to coordinate with other contractors.
- d. Demonstration of the proposed technical writer/editor to produce high quality reports, and knowledge of FHWA report standards.
- e. Adequacy of the schedule and the proposed allotment of labor by task.

2. Offeror's demonstration of technical competence as reflected in the proposed approach and depth of supporting technical discussions

- a. Demonstrated understanding of the work required by the level of detail provided in the prototype of draft set of the functional specifications contained in the proposal.
- b. Adequacy of the proposed summary of the pilot test plan.
- c. Adequacy, completeness and logic of the proposed approach to meet technical contract requirements.

B. Cost

In addition to the criteria listed above, relative cost will be considered in the ultimate award decision. Cost/price proposals will be analyzed to assess realism and probable cost to the Government. The proposed costs may be adjusted, for the purpose of evaluation, based upon the results of the cost realism assessment.

C. Past Performance

Past performance will be reviewed to assure that the offeror has relevant and successful experience and will be considered in the ultimate award decision. Past performance will not be scored.

D. Basis for Award

The Government will accept the offer that is considered the most advantageous to the Government. Of the three factors, (A) technical, (B) cost, and (C) past performance, technical is considered the most important. For selection purposes, past performance is of less importance than technical or cost.

**FORMAT
for
QUARTERLY PROGRESS REPORTS**

A. Accomplishments/Significant Findings by Task this Quarter:

B. Work Planned for Next Quarter by Task:

C. Effort Expended by Key Personnel:

Effort (Staff-Hours)

<u>Employee Name</u>	<u>Contract Time</u> <u>Allocated</u>	<u>Cumulative</u> <u>Last Quarter</u>	<u>Cumulative</u> <u>This Quarter</u>
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Princ. Investigator:

Other Key People:

D. ADP Usage:

Usage

<u>Item</u>	<u>Cost</u> <u>Allocated</u>	<u>Cumulative Cost</u> <u>Last Quarter</u>	<u>Time Used</u> <u>This Quarter</u>	<u>Cost</u> <u>This Quarter</u>	<u>Cum. Cost</u> <u>This Quarter</u>
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Labor:

Equipment:

E. Research Costs:

F. Identification of Problems/Recommended Solutions:

DTFH61-97-C-00046
Attachment No. 1b

Contract Title:

Reporting Date:

Contract Number:

FISCAL SUMMARY BY TASK

<i><u>Task</u></i>	<i><u>Title</u></i>	<i><u>Budgeted</u></i>	<i><u>Cumulative Last Quarter</u></i>	<i><u>This Quarter</u></i>	<i><u>Cumulative To Date</u></i>	<i><u>Cumulative Percent Work Completed To Date</u></i>
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Sample Format

RFP No. DTFH61-97-R-00046

Title: “Policy Review Module”

Proposal Submitted by: _____

Staffing Assignments/Task Breakdown

Name of Principal ^{1/} Role in Study

<u>TASKS</u>	<u>STAFF MEMBERS</u>	<u>STAFF-HOURS</u>	<u>TOTAL</u>

NOTE: All times shall be given in staff-hours.

1/ Biographies of each member shall be included in the staffing proposal.

**SAMPLE FORMAT
PRICE PROPOSAL BUDGET SUMMARY**

I. DIRECT LABOR

{List each proposed individual or labor category (insert additional lines if needed). Indicate if escalation is included and how it is applied.}

<i>Staffing</i>	<i>Estimated Hours</i>	<i>Hourly Rate</i>	<i>Estimated Cost</i>
<i>Total Direct Labor</i>			

II. LABOR OVERHEAD

Overhead Rate: Estimated Cost:

III. SUBCONTRACTOR

Direct Labor:

<i>Staffing</i>	<i>Estimated Hours</i>	<i>Hourly Rate</i>	<i>Estimated Cost</i>
<i>Total Direct Labor</i>			

Overhead Rate:

Other Direct Costs:

Travel:

G&A Rate:

Fee:

Total Estimated Cost:

IV. TRAVEL

Total Estimated Cost:

V. OTHER DIRECT COSTS

Total Estimated Cost:

VI. GENERAL & ADMINISTRATIVE (G&A) EXPENSE

G&A Rate: Estimated Cost:

VII. TOTAL ESTIMATED COST :

\$ _____

VIII. TOTAL FIXED FEE :

\$ _____

IX. TOTAL ESTIMATED COST AND FEE :

\$ _____

FHWA ADP Information and Requirements

Required FHWA ADP Information

(Complete the attached ADP Equipment and Services Form DOT F4220.21.)

All specifications for the acquisition or use of ADP equipment shall be submitted with Part III of the offeror's proposal.

A. Contracts for Mainframe/Minicomputer Systems or Software

- Any computer programs developed or modified for FHWA as a result of this project must be deliverable items to FHWA and written in either ANSI FORTRAN or Federal Standard COBOL. Exceptions to the use of these standard languages are permissible where other languages offer clear advantages. Such exceptions should be approved by the Contracting Officer's Technical Representative and the Chief of Data Systems Division.
- Any computer programs that are deliverable items to FHWA must be independent of any proprietary software packages.
- All computer systems/programs must be documented according to Federal Information Processing Standards Publication (FIPS PUB) #38, "Guidelines for Documentation of Computer Programs and Automated Data Systems," FIPS PUB #64, "Guidelines for Documentation of Computer Programs and Automated Data Systems for the Initiation Phase," and FHWA Documentation Guidelines as specified in Chapter VII of the FHWA IRM Manual (copy attached).
- All data and programs must be compatible with DOT's computer systems, AMDAHL 580, or compatible with a computer system at a facility agreed upon by the FHWA and the contractor.
- To facilitate complete evaluation on the part of FHWA, a complete documentation package, i.e., source programs, job control language set-ups, test data, systems and programming documentation as well as operations and users manuals, must be submitted to the Contracting Officer's Technical Representative (COTR) for final review and acceptance. The programs developed must be tested and debugged by the contractor for successful operation before submission.
- The programs must be acceptance tested on the DOT's computer system or on a computer system at an agreed upon facility prior to acceptance by the COTR. That is, the contractor must demonstrate that these programs can be successfully compiled and executed, using test data. The results of this test will be validated and reviewed for acceptance by the COTR.

B. Contracts for Microcomputer Systems

- Any computer programs developed or modified for FHWA as a result of this project must be deliverable items to FHWA.

- If it is necessary to utilize a proprietary software package in this project, this package must be readily available off-the-shelf and must run on MS/DOS machines without any hardware or software modifications.
- All computer systems/programs must be documented according to applicable FIPS PUBS and the Documentation Guidelines contained in Chapter VII of the FHWA IRM Manual.
- Any programs developed must be acceptance tested on an FHWA microcomputer. The results of this test will be validated and reviewed for acceptance by the COTR.

C. **All ADP Systems or Software Contracts**

- All data collected for FHWA as a result of this project must be deliverable items to FHWA.
- Punched cards must conform to the standards as specified in FIPS PUBS # 1, 13, 14, and 15, "Code for Information Interchange," "Rectangular Holes in Twelve Row Punched Cards," "Hollerith Punched Card Code," and "Subsets of the Standard Code for Information Interchange," respectively.
- Magnetic tapes must conform to the standards as specified in FIPS PUBS # 3 and 25, "Recorded Magnetic Tape for Information Interchange."
- Analog data reported on magnetic tape shall either be capable of being converted on FHWA's A/D conversion system or shall be converted to 9-track digital magnetic tape or punched cards in accordance with the previously mentioned FIPS PUBS.
- **NOTE:** The Federal Technical Information Service Publications, FIPS PUBS, are incorporated by reference and may be obtained upon request from the address listed below:

National Technical Information Service
5285 Port Royal Road
Springfield, Virginia 22161
Telephone Number: (703) 487-4650

ADP EQUIPMENT AND SERVICES

Instructions: This form shall be completed in addition to the SF-1411 or SF-1448. If any equipment is to be purchased, please enter a check in the corresponding far right column. Inclusive dates during which any item is required shall be entered in the corresponding section heading. All overheads must be included and identified as a separate line item in each section (I - VI)

I) SYSTEMS ANALYSIS AND PROGRAMMING

DATES REQUIRED

FROM _____ TO _____

LANGUAGE: FED STD COBOL ☐ ANSI FORTRAN ☐ OTHER _____

LABOR (SYS ANAL, PROGR, CODERS, ETC.)	HOURS	RATE/HR	COST

TOTAL SYSTEMS ANALYSIS AND PROGRAMMING COST

II) CENTRAL PROCESSOR REQUIREMENTS

DATES REQUIRED

FROM _____ TO _____

MAKE & MODEL	LOCATION	*MEMORY REQUIRED	TURN-AR TIME	OPERATE/CPU HOURS	RATE/HR	COST	CHK

TOTAL CENTRAL PROCESSING COST

III) PERIPHERAL REQUIREMENTS (INCL. STORAGE MEDIA)

DATES REQUIRED

FROM _____ TO _____

TYPE AND MODEL	QTY	RATE	COST	CHK

TOTAL PERIPHERAL REQUIREMENTS COST

IV) TERMINALS AND COMMUNICATIONS

DATES REQUIRED

FROM _____ TO _____

MAKE & MODEL	LOCATION	LINES	MODEM	CONNECT TIME (HOURS)	COST	CHK

TOTAL TERMINALS AND COMMUNICATIONS COSTS

V) DATA PREPARATION

DATES REQUIRED

FROM _____ TO _____

TYPE (KEYPUNCH, KEY-TAPE, KEY-DISK, ETC.)	HOURS	RATE/HR	RECORDS	RATE/REC	COST

TOTAL DATA PREPARATION COST

VI) RELATED SPECIAL PURPOSE ADP EQUIPMENT AND SERVICES

DATES REQUIRED

FROM _____ TO _____

TYPE (SPECIAL SOFTWARE, HARDWARE, ETC.)	QTY	RATE	COST	CHK

TOTAL SPECIAL PURPOSE ADP COST

TOTAL COST FOR ADP EQUIPMENT AND SERVICES	
--	--

* This is the maximum main memory required for problem programs excluding the Operating System.

CHAPTER VII FHWA IRM MANUAL

DOCUMENTATION
FOR
MICROCOMPUTER APPLICATIONS
AND INFORMATION SYSTEM

**DOCUMENTATION GUIDELINES
FOR MICROCOMPUTER APPLICATIONS
AND INFORMATION SYSTEM**

Two types of documentation are required to document microcomputer applications and information systems: a Users Guide and a System Maintenance Manual. The basic purpose of a Users Guide is to provide enough information to permit use of a system by someone unfamiliar with it. The purpose of a System Maintenance Manual is to provide sufficient information to allow a programmer to correct any problems that arise and to permit the program to be maintained and updated as necessary. The following guidelines for preparing the Users Guide and System Maintenance Manual are geared to large, complex, microcomputer systems that have many users. For simpler systems with one or only a few users, it is sufficient to provide enough documentation to meet the basic purpose of a user guide or system maintenance manual.

There is an additional quick and easy way augment the documentation provided in the Users Guide and the System Maintenance Manual: by using comments in the source or program code. This addition to other documentation can be especially helpful when added to the more limited documentation provided for simpler applications.

A. USERS GUIDE

The information in the Users Guide is presented in four sections:

<u>Section 1</u>	Introduces the Users Guide and provides system background.
<u>Section 2</u>	Provides a general description of the application.
<u>Section 3</u>	Contains step-by-step operating procedures.
<u>Section 4</u>	Describes each output report and provides a sample of each.

Each of these four sections is described in more detail below.

NOTE: Data that are too numerous or too detailed to be presented in figures or in narrative texts should be incorporated into appendices and referenced in the relevant paragraphs of the text.

1. **INTRODUCTION**. The introductory section of the Users Guide should include the following:

a. **Purpose of the Users Guide**. Use the following paragraph, modified as necessary, to describe the purpose and format of the Users Guide:

The purpose of the Users Guide for (Project Name, Name of Application, responsible organization, and location) is (1) to describe the system so that potential users can determine its applicability, and, (2) to provide users with all the information necessary to operate and use the system efficiently and effectively.

b. **Background Information**. This paragraph summarizes the relevant aspects of the history and development of the system or application, describing briefly:

- (1) The basis for the system (e.g., policy, directive of management, IRM improvement project)
- (2) The general nature and intended users of the system or application (e.g., program management, technical application, administrative application, or utility/other), and when it would be appropriate to use the application.
- (3) System owner (indicate the organization responsible for the system).
- (4) Standards used in system development, such as hardware, software, telecommunications, etc.
- (5) Previously published documentation on this or a related application.

- c. **Terms and Abbreviations**. This Users Guide should be written in non-technical language for use by non-ADP personnel. An appendix to the Users Guide should define the technical terms, abbreviations, and acronyms used. However, data element names and data codes should not be included in the list of terms and abbreviations. Instead, include them in Section 2.f. (see below).
- d. **Security**. Discuss fully all security considerations, including provisions for applying the Privacy Act. Describe any measures provided by the system to protect the database, such as User IDs, and the security responsibilities imposed on the users. Also discuss any measures for limiting entry to the system and access to the database.

2. **DESCRIPTION OF THE APPLICATION**. The second section of the Users Guide should provide the following:

- a. **Description**. Furnish a brief description of the objectives, capabilities, and any special features or benefits of the system or application.
- b. **Functions**. Provide a narrative description of the functions performed by the system. Include a chart showing the data flow through the system and the relationships of the operating functions to the organizations that are the sources of the data input and recipients of information outputs.
- c. **System Configuration**. List or describe the hardware, software, and communications environment required by the system, including any relevant options.
- d. **System Organization**. Provide a general overview of the logical parts into which the system is divided, and the role of each part in the total system process. System may be divided into processing modules or subsystems, or, in the case of systems developed using a commercial data base management software such as dBASE III+, they may be organized according to pre-packaged programs or standard data base files. In these cases also describe the substructure.
- e. **Performance**. Briefly describe the overall performance capabilities and limitations of the system and the quality assurance factors incorporated to protect the integrity of the system software and data. Where appropriate include:
 - (1) Quantitative information on inputs, outputs, response time, processing times, data limitations and error rates.
 - (2) Qualitative information about flexibility and reliability.
- f. **Data Base**. Describe the data files in the database that are referenced, supported, or kept current by the software. Describe each data element in a data element dictionary and relate the data element to the file(s) in which it is used. This information may be presented in a figure(s) or in an appendix, or, for simple systems, within the narrative text.

g. **General Description of System Inputs and Outputs**.

- (1) **Inputs**. Briefly describe the media and procedures used for entering data into the system. Describe any user source documents. Provide samples of source documents and the function (menu or prompt) screens used for data entry in appendices and reference them in the text.
- (2) **Outputs**. Briefly describe the type of outputs produced by the system. Reference the reports provided in conjunction with Section 4, Output Reports, below. Also reference any display screen outputs that are included in an appendix.

3. **SYSTEM OPERATION**

Provide step-by-step instructions to permit the user to operate the system and generate outputs. The structure of this section may vary, but it should start with a paragraph on start up procedures and conclude with a paragraph on exiting the system. In between, step-by-step instructions should be provided for each different procedure.

If the operating procedures are too complex to be presented in the narrative text, or if the system contains more than one processing module or subsystem, then the procedures should be placed in an appendix, with appropriate references in the text. Also, refer to appendices containing sample input and output screens, or any other data pertinent to the operation of the system.

These instructions should be as simple as possible. They should be test by having at least one and preferably more employees who are not familiar with the application sit down with the draft instructions and try to run the program without additional instruction.

4. **OUTPUT REPORTS**

Prepare a narrative description of each output report available to the user. Include all the information necessary for the user, including the purpose, distribution, security, and use of each report. Provide samples of each report in an appendix referenced in this section. If only a few reports are involved, the samples may be included in this section.

B. SYSTEM MAINTENANCE MANUAL

The information in the System Maintenance Manual is presented in three sections:

<u>Section 1</u>	Introduces the manual and provides background information on the system.
<u>Section 2</u>	Describes the environment in which the system operates.
<u>Section 3</u>	Describes program and data characteristics in detail and lists the systems programs.

NOTE: Data that are too extensive or too detailed to be presented in figures or in narrative are incorporated in appendices and referenced in the text.

1. **INTRODUCTION**. The introductory section of the System Maintenance Manual should include the following:

- a. **Purpose of the System Maintenance Manual** . Use the following paragraph, modified as appropriate, to describe the purpose of the System Maintenance Manual:

The System Maintenance Manual for (project name, name of developing organization), provides programmers with the information necessary to maintain the system efficiently and effectively.

- b. **Project Description and References** . Briefly describe the system including its objectives and uses. Specify the general nature of the application, i.e., program management, technical application, administrative application, or utility/other. Indicate the organization responsible for the system, the projected user(s), and when it would be appropriate to use the application.

Summarize the relevant aspects of the history and development of the application. Attach the following documents or list them showing the author or source, reference number, title, date, point of contact, and security classification (if any):

- (1) Users Guide.
- (2) Project request and other pertinent documentation on the project.
- (3) Standards used in system development, such as hardware, software, telecommunications, etc.

- c. **Terms and Abbreviations**. The System Maintenance Manual may be written in standard ADP technical language. List and define terms unique to the system, as well as more general ADP terms that may be subject to interpretation. Include abbreviations and acronyms in an appendix and reference it in the text. Do not include data element names and data codes in this list; instead include them in Section 3.b, data descriptions.

2. **SYSTEM DESCRIPTION**

- a. **System Application**. Describe the objectives and organization of the system and the functions performed. Provide a flowchart(s) showing the interrelationships of the major components of the system.
- b. **System Environment**. Describe the system hardware characteristics and the software used to support the system.
- c. **Communications**. Describe any communication facilities necessary or available to operate or interface with the system.
- d. **Interfaces**. Briefly describe any existing or potential hardware or software interfaces with other equipment.
- e. **Security**. Discuss the security measures instituted to protect system software and data.

3. **PROGRAM AND DATA DESCRIPTIONS**

- a. **Program Descriptions**. Supply all the details and characteristics of each program and subroutine or equivalent needed by the programmer in order to maintain the system. Identify (by title, tag, and version number), list, and described each program. Include all appropriate information on program functions, inputs and outputs, operations performed, error conditions, and interfaces with other systems, programs, and/or subroutines. Provide program listings of each program and subroutine or the equivalent file listings in an appendix and reference them in the text.
- b. **Data Description**. Provide a complete description of the system's database(s), including the database structure and the components of each data element/field in the database. Indicate storage requirements and limitations. Present record descriptions in a data element dictionary or on record content sheets in an appendix and reference them in the text.

OF-17 (12/93)

FAR (48) CFR 53.214(g)

Offer Label

FAR (48) CFR 53.215-1(h)

NOTICE TO OFFEROR

1. THIS LABEL MAY ONLY BE USED ON ENVELOPES LARGER THAN 156 mm (6 1/8 INCHES) IN HEIGHT AND 292 mm (11½ INCHES) IN LENGTH.
2. Print or type your name and address in the UPPER left corner of the envelope containing your offer.
3. Complete the bottom portion of this form and paste it on the LOWER left corner of the envelope, unless the envelope is 156 mm by 292 mm (6 1/8 inches by 11½ inches) or smaller.

OFFER

SOLICITATION NO.

DATE FOR RECEIPT OF OFFERS

TIME FOR RECEIPT OF OFFERS

AM |

PM

OFFICE DESIGNATED TO RECEIVE OFFERS

*GPO:1994-367-191